

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID J. BLAESER
and RYAN A. JURGENSON

Appeal No. 1999-2285
Application 08/826,277

ON BRIEF

Before JERRY SMITH, LALL and DIXON, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 25-34, which constitute all the claims remaining in the application. An amendment after final rejection was filed on October 23, 1998 and was entered by the examiner.

The disclosed invention pertains to the field of

magnetic head suspensions for supporting a magnetic head at a fixed distance from a rigid arm. More particularly, the invention relates to a unitary flexure and load beam formed from a single sheet of material.

Representative claim 25 is reproduced as follows:

25. In a magnetic head suspension for supporting a magnetic head at a fixed distance from a rigid arm, a unitary flexure and load beam formed from a single sheet of material, said suspension comprising:

a. a spring load beam element portion joined to the arm at a proximal end thereof; and

b. a flexure portion projecting beyond a distal apex of the spring load beam element portion, the flexure portion being divided into a central head mounting support means having an arcuate perimeter for receiving a disk drive head to be bonded thereto;

a first plurality of arcuate slots in a surface of the flexure portion around substantially an entire perimeter of the support means with exception of two gimbal support pivots aligned on opposite sides of the support means to define a first set of arcuate flexible arms for gimbal supporting the support means about a first rotational axis of the support means; and

a second plurality of arcuate slots in the surface of the flexure portion around substantially the entire perimeter of the support means and around the first plurality of arcuate slots with exception of two gimbal support pivots aligned on opposite sides of the support means to define a second set of arcuate flexible arms for gimbal supporting the support means about a second rotational axis of the support means which is angularly offset from the first rotational axis;

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wherein the first set of flexible arms includes a partially thinned region having reduced material thickness to reduce the spring rate of the first set of flexible arms, the material thickness being measured in a direction perpendicular to the first rotational axis and the second rotational axis.

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The examiner relies on the following references:

Higashiyama	4,389,688	June 21, 1983
Yumura et al. (Yumura)	5,079,660	Jan. 07, 1992
Ariga	JP 60-167172	Aug. 30, 1985

Claims 25-34 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Higashiyama in view of Ariga and Yumura.

Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

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It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 25-34. Accordingly, we reverse.

Appellants have indicated that for purposes of this appeal the claims will all stand or fall together as a single group [brief, page 7]. Consistent with this indication appellants have made no separate arguments with respect to any of the claims on appeal. Accordingly, all the claims before us will stand or fall together. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been

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led to

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modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re

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Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

Only those arguments

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actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

The examiner cites Higashiyama as teaching the claimed invention except that Higashiyama does not show a one piece load beam and flexure along with arms which have been thinned in a direction perpendicular to the transverse and longitudinal directions. Ariga is cited as teaching a one piece load beam and flexure. The examiner finds that it would have been obvious to make the flexure and load beam of Higashiyama as a one piece integral unit as taught by Ariga. Yumura is cited for teaching a gimbal in which the arms have been thinned in the width direction of the gimbal. The examiner finds that it would have been obvious to thin the arms of Higashiyama as taught by Yumura to reduce the torsional rigidity of the gimbal. Although Yumura does not teach the thinning of material in the height direction as claimed, the examiner finds that there is no unobvious result in thinning the gimbal arms in the height direction over that

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of thinning the gimbal arms in the width direction [answer,
pages 3-4].

Appellants argue that there is no motivation for combining the teachings of the applied prior art because the artisan would not look to references which disclose T-type flexures in an attempt to produce the integral flexure and load beam of the claimed invention. Appellants also argue that the combination proposed by the examiner would improperly destroy the intended function of Higashiyama. Finally, appellants argue that the thinning of gimbal arms in the width direction as suggested by Yumura does not evidence the obviousness of the claimed invention which thins gimbal arms in the height direction [brief, pages 9-15]. The examiner disagrees with each of these arguments [answer, pages 5-7].

Although appellants' first two arguments above do not convince us that the rejection is in error, we do find the third argument to be convincing that the rejection is not supported by the evidence on this record. As pointed out by appellants and admitted by the examiner, Yumura thins gimbal arms in the width direction rather than in the height direction as claimed. The examiner's position is tantamount to saying that a given amount of material can obviously be removed from a gimbal without regard to where this material is

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taken from. In this art, however, each physical change in the suspension assembly results in a plurality of effects on the overall operation of the assembly. The artisan must consider each of these effects on the assembly when making a modification to a known assembly. The examiner's finding that a thinning of arms in the height direction would have been obvious in view of the thinning of arms in the width direction is based on nothing more than pure speculation that no differences would result from such a modification. Even if this conjecture by the examiner were proven to be true, which has not happened, the examiner has still failed to explain why the artisan would have been motivated to make this change so as to arrive at the claimed invention. The fact that an equivalent result could be achieved in a proposed modification does not make the modification obvious unless the prior art suggests the desirability of this modification. There is no suggestion in the applied prior art to thin gimbal arms in the height direction as set forth in each of the claims on appeal.

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For the reasons discussed above, we do not sustain the examiner's rejection of the claims on appeal. Therefore, the decision of the examiner rejecting claims 25-34 is reversed.

REVERSED

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JERRY SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
PARSHOTAM S. LALL)	
Administrative Patent Judge)	APPEALS AND
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